

**To:** Phil North/R10/USEPA/US@EPA[]  
**From:** Carol A Woody  
**Sent:** Tue 3/30/2010 4:31:21 PM  
**Subject:** RE: Bristol Bay Smolts

Hi Phil,  
RE: ADFG egg to smolt estimate.

How do they get that estimate?  
Is there a confidence interval?

I would not use 10% egg to fry, it's too optimistic.  
Kvichak is not doing so hot and I think it has to do with their current underescapement goals.

caw

-----Original Message-----

From: North.Phil@epamail.epa.gov [mailto:North.Phil@epamail.epa.gov]  
Sent: Monday, March 29, 2010 5:23 PM  
To: Carol A Woody  
Subject: RE: Bristol Bay Smolts

Hi Carol Ann,  
Thanks for the response. According to Ken Tarbox ADFG assumes 10% egg to smolt survival. It seems that the numbers you are using are much smaller.

You left off the name of the man at ADFG to call.

Phil

Phillip North  
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"To protect your rivers, protect your mountains."

From: Carol A Woody <carolw@alaskalife.net>

To: Phil North/R10/USEPA/US@EPA

Date: 03/28/2010 03:36 PM

Subject: RE: Bristol Bay Smolts

Hi Phil,

Smolt outmigration estimation is a difficult task and there are few systems for which we have a good estimate. Older ADFG data for the Kvichak smolt outmigration from 1956 to 2001 indicate a range of 2 M to 609 M smolts outmigrating from the Kvichak.

I attended the annual Southwest Interagency Meeting (SWIM) a few weeks ago and saw current studies presented; there is new research focused on determining current smolt outmigration estimates. LGLs Guy Wade for BBSRI is doing the work and it seems to have promise. His email is gwade@lgl.com

You likely know the Kvichak has been listed as a stock of concern since 2003 and ADFG also reduced the minimum escapement goal from 4 M to 2 M (they couldn't meet the 4M so hey, lets change it!!) Anyway, the man who can help give you insight on past and present smolt numbers is

It was good to see you at the meeting. Comments or criticisms on how to improve our presentations are always welcome.

Take care,

Carol Ann

From: North.Phil@epamail.epa.gov [mailto:North.Phil@epamail.epa.gov]  
Sent: Thursday, March 25, 2010 2:56 PM  
To: carolw@alaskalife.net  
Subject: Bristol Bay Smolts

Hi Carol Ann,  
I thought last night's forum was really good. I tried to keep my mouth closed but could not. I wonder why government employees feel a need to defend the process we are charged with implementing. Why not just describe its strengths and weaknesses? Meaningful public participation is not a strength of our decision making processes. Unless the

commenting public is technically very savvy, which is usually not the case, the comments are not much use to the highly technical process. Why not say so and make expectations realistic? With you, Dave and others Pebble will be the exception to the public not being technically savvy.

Your number of 45 to 50 million smolts in Lake Iliamna surprised me a bit. I thought it would be a larger number. I have been exploring the importance of Bristol Bay outmigrants to marine ecosystems. I calculated an idealized estimate, based on 10% survival from egg to smolt, of 1.57 billion smolts produced from all Nushagak and Kvichak watersheds in 2008. Do you have any numbers for actual smolt outmigration from either of those watersheds. Or, better yet, from any of the various tribes?

Phil

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